REMARKS

Information Disclosure Statement.

2. The Office Action states that the "information disclosure statement (IDS) submitted on 10/7/2004 is in compliance with the provisions of 37 CFR 1.97 with the exception of reference C of the Non-Patent Literature documents: Akami. "How it Works" which fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Accordingly, the information disclosure statement is being considered by the examiner with the exception of the reference mentioned above."

Applicant has concurrently submitted an Information Disclosure Statement in compliance with the provisions of 37 CFR 1.97, and in accordance with 37 CFR 1.98(b), which properly refers to and includes a legible copy of the noted non-patent literature publication or that portion which caused it to be listed. The Commissioner is authorized to charge any fees due to the Glenn Patent Group Deposit Account No. 07-1445, Customer No. 22862.

Drawings.

3. The Office Action states that the "drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 20 and 24. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office Action to avoid abandonment of the application."

Applicant has amended the Specification on page 8, lines 5-6, to state "A service provider 22, *e.g.* an Internet service provider 22, having a provider address 26, is

connected 24 to the network 12, such as the Internet 12." Support is seen in the Application as filed, at least in Figure 1 and on page 8, lines 5-6.

Applicant has also amended the Specification on page 8, lines 21-23, to state "The content store 15 is often duplicated and stored within the content store 15 of one or more mirror sites 18, *e.g.* 18a-18k that are connected 20 to the network 12, to increase the speed and capacity to distribute the information 15 to a large number of user terminals 30." Support is seen in the Application as filed, at least in Figure 1 and on page 8, lines 21-23.

Applicant submits that the specification as amended, properly refers to the reference characters 20 and 24, and complies with 37 CFR 1.121(b). Applicant also submits that no new matter has been entered.

4. The Office Action states that the "drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 30b (pg. 8, line(s) 2, 7, 13, and 15)."

Applicant has submitted a replacement sheet for Figure 1 in compliance with 37 CFR 1.121(d) to fully comply with the Office Action.

Specification.

5. The Office Action states that the "use of the trademark America Online, Inc. (pg. 11 line(s) 20 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might affect their validity as trademarks".

Applicant has diligently attempted to properly respond to the Examiner's request, and has amended the Specification to refer to AOL® (AOL LLC, of Dulles, VA).

6. The Office Action states that the "disclosure is objected to because of the following informalities: the number "194" should be "104" (pg. 10 line(s) 5)." Appropriate correction is required".

Applicant has amended the Specification to overcome the objection.

7. The Office Action states that the "disclosure is objected to because of the following informalities: missing the "e" in the word Advantages (pg. 10 line(s) 36). Appropriate correction is required".

Applicant has amended the Specification to overcome the objection.

35 U.S.C. § 112. Claim Rejections.

9-10. The Office Action states that "Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard as the invention."

In regard to dependent Claim 11, the Office Action stated that from "hereinafter of the examination the Examiner will use the term of a web server for web service."

Applicant has amended dependent Claims 11 and 27, to particularly point out and distinctly claim that the localization information is stored at the web server. Support is seen in the Application as filed, at least on page 7, lines 14-15; and in Figures 2, 4, and 5.

Applicant therefore submits that Claim 11 as amended overcomes the rejection under 35 U.S.C. 112, second paragraph.

35 U.S.C. § 102. Claim Rejections.

12-24. The Office Action states that "Claims 1, 2, 5, 6, 8, 10-12, 16-18, 21, 22, 24, 26-28, 31, 32, 36, 38 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01."

Applicant disagrees that Claims 1, 17, and 31 are anticipated by Farber et al.

Hilton Davis / Festo Statement

For sake of convenience in prosecution, Applicant has amended Claims 1, 17 and 31, as discussed below, to particularly point out and distinctly claim some of the preferred embodiments of the invention. Applicant reserves the right to present the same or similar claims in a related Application.

Applicant has amended independent Claim 1, to claim a process implemented across a network for providing a link to a preferred mirror instance within a plurality of mirror instances of a content store, comprising the steps of:

providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application;

determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

storing the determined localization information;

receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content;

querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal;

dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server; and

transmitting the localized link to the client terminal.

Applicant has amended independent Claim 17, to claim a process implemented across a network for providing a link to a preferred mirror instance within a plurality of mirror instances of a content store, comprising the steps of:

providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application;

determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect;

storing the determined localization information;

receiving a request at the web server from the client terminal, the request comprising a link to the content store;

querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address;

dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server; and

transmitting the localized link to the client terminal.

Applicant has amended independent Claim 31, to claim a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal.

Support is seen in the Application as filed, at least on page 7, lines 11-21 and 25-35; on page 8, lines 3-7 and 14-28; on page 8, line 31 to page 10, line 16; on page 10, line 36 to page 11, line 10; on page 11, lines 19-23; and in Figures 1-5.

Farber et al. describe "optimized network resource location", as seen at least in the Abstract, wherein:

> "Resource requests made by clients of origin servers in a network are intercepted by reflector mechanisms and selectively reflected to other servers called repeaters. The reflectors select a best repeater from a set of possible repeaters and redirect the client to the selected best repeater. The client then makes the request of the selected best repeater. The resource is possibly rewritten to replace at least some of the resource

identifiers contained therein with modified resource identifiers designating the repeater instead of the origin server."

Applicant notes that the Office Action concedes that "Farber et al. does not disclose, wherein the localization information comprises a determined number of hops for each mirrored instance of the content store to each network from which users connect."

As well, Applicant notes that the Office Action concedes that The Office Action concedes that "Farber et al. do not disclose, wherein the localization information comprises a latency for each mirrored instance of the content store to each network from which users connect."

In regard to Claim 1, as amended, Applicant submits that Farber does not disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

"storing the determined localization information";

"receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In regard to Claim 17, as amended, Applicant submits that Farber does not disclose or suggest a process which, *inter alia,* comprises the steps of:

"providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect";

"storing the determined localization information";

"receiving a request at the web server from the client terminal, the request comprising a link to the content store";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In regard to Claim 31, as amended, Applicant submits that Farber does not disclose or suggest "a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a

user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal."

Applicant therefore submits that independent Claims 1, 17, and 31, as amended, overcome the rejection under 35 U.S.C. 102(b) as being anticipated by Farber et al. As well, there is no suggestion, express or implied, that Farber et al. be modified to meet Claims 1, 17, and 31, as amended.

The Examiner bears the burden of establishing a *prima facie* case of anticipation (In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986)). The prior art reference must disclose each element of the claimed invention, as correctly interpreted, and as arranged in the claim (Lindermann Maschinefabrik Gmbh v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim (MPEP 2131).

As Claims 2-16 depend from amended independent Claim 1, as Claims 18-30 depend from amended independent Claim 17, and as Claims 32-43 depend from amended independent Claim 31, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

35 U.S.C. § 103. Claim Rejections.

27-34. The Office Action states that "Claims 3, 19, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claims 1, 17, and 31 above, and further in view of Guyton et al. ("Locating Nearby Copies of Replicated Internet Servers" (1995))."

In regards to Claims 3, 19, and 33, the Office Action concedes that "Farber et al. do not disclose, wherein the localization information comprises a determined number of hops for each mirrored instance of the content store to each network from which users connect."

However, the Office Action also stated that "In the same field of endeavor Guyton et al. teach whereas the localization information comprises the number of hops to each content store (pg. 290 Sec. 3 – pg. 291 Sec. 5)."

The Office Action also states that "Claims 4, 20, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claims 1, 17, and 31 above, and further in view of Bohannon et al. (US PGPub 2002/0112036) filed on 11/30/00 and published on 8/15/02."

The Office Action also concedes that "Farber et al. do not disclose, wherein the localization information comprises a latency for each mirrored instance of the content store to each network from which users connect."

However, the Office Action also stated that "In the same field of endeavor Bohannon et al. teach whereas the localization information comprises the localization information comprises the latency (¶0032)."

Hilton Davis / Festo Statement

Applicant has amended Claims 1, 3, 4, 17, 19, 20, 31, 33, and 34, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Applicant respectfully submits that Claims 1, 17, and 31 as amended, are patentable over Farber et al., in view of any of Guyton et al. and/or Bohannon et al.

As discussed above, Applicant has amended independent Claim 1, to claim a process implemented across a network for providing a link to a preferred mirror instance within a plurality of mirror instances of a content store, comprising the steps of:

providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application;

determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

storing the determined localization information;

receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content;

querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising

a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal;

dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server; and

transmitting the localized link to the client terminal.

As also noted above, Applicant has amended independent Claim 17, to claim a process implemented across a network for providing a link to a preferred mirror instance within a plurality of mirror instances of a content store, comprising the steps of:

providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application;

determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect;

storing the determined localization information;

receiving a request at the web server from the client terminal, the request comprising a link to the content store;

querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address;

dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server; and

transmitting the localized link to the client terminal.

Furthermore, as discussed above, Applicant has amended independent Claim 31, to claim a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal

having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal.

Support is seen in the Application as filed, at least on page 7, lines 11-21 and 25-35; on page 8, lines 3-7 and 14-28; on page 8, line 31 to page 10, line 16; on page 10, line 36 to page 11, line 10; on page 11, lines 19-23; and in Figures 1-5.

Farber et al. describe the selection of a best repeater, as seen at least in Col. 11, lines 4-58, wherein:

"Selecting the Best Repeater

If the reflector 108 determines that it will reflect the request, it must then select the best repeater to handle that request (as referred to in step B3-

1). This selection is performed by the Best Repeater Selector (BRS) mechanism described here.

The goal of the BRS is to select, quickly and heuristically, an appropriate repeater for a given client given only the network address of the client. An appropriate repeater is one which is not too heavily loaded and which is not too far from the client in terms of some measure of network distance. The mechanism used here relies on specific, compact, pre-computed data to make a fast decision. Other, dynamic solutions can also be used to select an appropriate repeater.

The BRS relies on three pre-computed tables, namely the Group Reduction Table, the Link Cost Table, and the Load Table. These three tables (described below) are computed off-line and downloaded to each reflector by its contact in the repeater network.

The Group Reduction Table places every network address into a group, with the goal that addresses in a group share relative costs, so that they would have the same best repeater under varying conditions (i.e., the BRS is invariant over the members of the group).

The Link Cost Table is a two dimensional matrix which specifies the current cost between each repeater and each group. Initially, the link cost between a repeater and a group is defined as the "normalized link cost" between the repeater and the group, as defined below. Over time, the table will be updated with measurements, which more accurately reflect the relative cost of transmitting a file between the repeater and a member of the group. The format of the Link Cost Table is <Group ID><Group ID><link cost>, where the Group ID's are given as AS numbers.

The Load Table is a one dimensional table which identifies the current load at each repeater. Because repeaters may have different capacities, the load is a value that represents the ability of a given repeater to accept additional work. Each repeater sends its current load to a central master repeater at regular intervals, preferably at least

approximately once a minute. The master repeater broadcasts the Load Table to each reflector in the network, via the contact repeater.

A reflector is provided entries in the Load Table only for repeaters which it is assigned to use. The assignment of repeaters to reflectors is performed centrally by a repeater network operator at the master repeater. This assignment makes it possible to modify the service level of a given reflector. For instance, a very active reflector may use many repeaters, whereas a relatively inactive reflector may use few repeaters. Tables may also be configured to provide selective repeater service to subscribers in other ways, e.g., for their clients in specific geographic regions, such as Europe or Asia."

Farber et al. describe further details pre-computed tables, as seen at least in Col. 11, lines 18-22, wherein:

"The BRS relies on three pre-computed tables, namely the Group Reduction Table, the Link Cost Table, and the Load Table. These three tables (described below) are computed off-line and downloaded to each reflector by its contact in the repeater network."

As noted above, the Office Action concedes that "Farber et al. do not disclose, wherein the localization information comprises a determined number of hops for each mirrored instance of the content store to each network from which users connect."

However, the Office Action also stated that "In the same field of endeavor Guyton et al. teach whereas the localization information comprises the number of hops to each content store (pg. 290 Sec. 3 – pg. 291 Sec. 5)."

Guyton et al. describe locating nearby copies of replicated Internet servers, as seen at least in the Abstract, wherein Guyton et al. considers "the problem of choosing among a collection of replicated servers, focusing on the question of

how to make choices that segregate client/server traffic according to network topology".

As noted at least on page 290, section 3, Guyton et al. considers "only hop counts and round trip times", and relegates "other network issues to future work". While Guyton et al. describe Internet Hop-Count Statistics, as seen at least in Table 1, Guyton et al. then describe the computation of "distances when only partial routing knowledge is available (e.g. allowing a distance to be inferred between a client and server given measurements from a measurement beacon for each)."

As well, as noted above, The Office Action also concedes that "Farber et al. do not disclose, wherein the localization information comprises a latency for each mirrored instance of the content store to each network from which users connect."

However, the Office Action also stated that "In the same field of endeavor Bohannon et al. teach whereas the localization information comprises the localization information comprises the latency (¶0032)."

Bohannon et al. describe a method and apparatus for discovering client proximity, as seen at least in the Abstract, wherein:

> "A method and a system are described for directing a client to the most optimal, most available Web site or to the most optimal content in a distributed content environment, using an Internet Site Selector, which is an Internet appliance that optimizes the performance of domains hosted on mirrored, geographically distributed Web sites. The system includes various components including the Internet Site Selectors which co-locate with each Web site. The method comprises a number of steps including sending client requests to a primary or main site, redirecting by an Internet Site Selector coupled to the primary or main site the modified client

requests to all other participating Internet Site Selectors. Several modes and deployments of the Internet Site Selectors, including geographic site selection, multiple Internet Site Selectors at each Web site, Internet Site Selector grouping, Internet Site Selectors in content routing are described."

Bohannon et al. describe details regarding chronometrically optimal site selection are seen at least on ¶0032, wherein:

"The invention provides a process in which a client is directed to the to the chronometrically optimal location for that client. Chronometrically optimal being defined for the purposes of this document, as, `providing the best overall response time, taking into account all factors which affect response times, including geographical distance, network topology (latency), and server response time`. This is accomplished by a process that determines chronometrically optimal site selection based on the network response time to the client from the participating Web site. According to the invention, by using a synchronization method to instruct each site selector to respond to a client's original request simultaneously, the client is able to first receive the fastest responding Web site's response. These responses must travel over the same network path as the server's data to the client, and therefore provide an accurate representation of what the client's traffic must endure. All the routing metrics, e.g. network congestion and delays, are inherently included, eliminating complicated schemes used in their calculation. If, for any reason, a site is unavailable it does not participate in sending the response to the client and therefore is not chosen as the most optimal site..."

Applicant submits that Bohannon et al. teach away from Farber et al.

Applicant notes that, while Bohannon et al. refer to latency as a factor which affects response times, Bohannon et al. clearly describe an instruction to "each site selector to respond to a client's original request simultaneously", wherein "the client is able to first receive the fastest responding Web site's response".

Applicant submits that such a process as described by Bohannon et al. eliminates "schemes used in their calculation", which inherently teaches away from storing localization data localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers, and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal.

Therefore, Applicant submits that one having ordinary skill in the art at the time of the invention would not reasonably combine the teachings of Farber at al. and Bohannon et al.

As well, in regard to Claim 1, as amended, Applicant submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. not disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

"storing the determined localization information";

"receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In addition, in regard to Claim 17, as amended, Applicant submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. do not disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect";

"storing the determined localization information";

"receiving a request at the web server from the client terminal, the request comprising a link to the content store";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

Furthermore, in regard to Claim 31, as amended, Applicant submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. do not disclose or suggest "a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal."

Applicant therefore submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. fail to meet Claims 1, 17, and 31, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., and/or Bohannon et al. be modified to meet Claims 1, 17, and 31, as amended.

Furthermore, it would take significant modification and undue experimentation for Farber et al., Guyton et al., and/or Bohannon et al. to meet Claims 1, 17, and 31, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., and/or Bohannon et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, 17, and 31, as amended, overcome the rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al. (US 6,185,598) in view of Guyton et al. ("Locating Nearby Copies of Replicated Internet Servers" (1995); and/or Bohannon et al. (US PGPub 2002/0112036).

As Claims 2-16 depend from amended independent Claim 1, as Claims 18-30 depend from amended independent Claim 17, and as Claims 32-43 depend from amended independent Claim 31, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

Applicant has also amended Claims 3, 19, and 33, to claim that the function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal comprises a determination of a mirror

instance having the lowest number of hops. Support is seen in the Application as filed, at least on Page 10, lines 14-18.

Applicant submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. fail to meet Claims 3, 19, and 33, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., and/or Bohannon et al. be modified to meet Claims 3, 19, and 33, as amended. Furthermore, it would take significant modification and undue experimentation for Farber et al., Guyton et al., and/or Bohannon et al. to meet Claims 3, 19, and 33, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., and/or Bohannon et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 3, 19, and 33, as amended, overcome the rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al. (US 6,185,598) in view of Guyton et al. ("Locating Nearby Copies of Replicated Internet Servers" (1995); and/or Bohannon et al. (US PGPub 2002/0112036).

In addition, Applicant has amended Claims 4, 20, and 34, to claim that the function of the stored hop information and the stored latency information

between each of the mirror instances and the client terminal comprises a determination of one or more mirror instances having the lowest number of hops, and in the case of a tie, the preferred mirror instance additionally comprises the lowest latency. Support is seen in the Application as filed, at least on Page 10, lines 14-19.

Applicant submits that, even in combination, Farber et al., Guyton et al., and/or Bohannon et al. fail to meet Claims 4, 20, and 34, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., and/or Bohannon et al. be modified to meet Claims 4, 20, and 34, as amended. Furthermore, it would take significant modification and undue experimentation for Farber et al., Guyton et al., and/or Bohannon et al. to meet Claims 4, 20, and 34, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., and/or Bohannon et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 4, 20, and 34, as amended, overcome the rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al. (US 6,185,598) in view of Guyton et al. ("Locating Nearby Copies of Replicated Internet Servers" (1995); and/or Bohannon et al. (US PGPub 2002/0112036).

35-44. The Office Action states that "Claims 7, 9, 23, 25, 37, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claims 1, 17, and 31 above, and further in view of Kenner et al. (US 6,003,030) filed on 10/18/96 and patented on 12/14/99."

In regard to Claims 7, 23, and 37, the Office Action concedes that "Farber et al. do not disclose wherein the localization information comprises mirror server operation information." In regard to Claims 9, 25, and 39, the Office Action also concedes that "Farber et al. do not disclose, wherein the localization information comprises network information." As well, In regard to Claim 40, the Office Action concedes that "Farber et al. do not disclose, wherein the localization information comprises a map of IP address space within a global routing table."

However, the Office Action also stated that "In the same field of endeavor Kenner et al. teach whereas the localization information has mirror server operation information (Col. 6 line(s) 11-12)." The Office Action also stated that "In the same field of endeavor Kenner et al. teach whereas the localization information has network segment information (Col. 6 line(s) 9-12)." Furthermore, the Office Action also stated that "In the same field of endeavor Kenner et al. teach whereas the localization information comprises a map of IP address space within a global routing table (Col. 8, line(s) 48-67 – Col 9 line(s) 1-2)."

Kenner et al. describe a system and method for optimized storage and retrieval of data on a distributed computer network, as seen at least in the Abstract, wherein:

> "A system and method for the optimized storage and retrieval of video data at distributed sites calls for the deployment of "Smart Mirror" sites throughout a network, each of which maintains a copy of certain data managed by the system. Every user is assigned to a specific delivery site

based on an analysis of network performance with respect to each of the available delivery sites. Generalized network performance data is collected and stored to facilitate the selection of additional delivery sites and to ensure the preservation of improved performance in comparison to traditional networks."

Kenner et al. describe a delivery site file, as seen at least in Col. 8, line 48 to Col. 9, line 2, wherein:

"In one embodiment, the delivery site file will have a format generally as follows:

1. File Revision Number and Message. The file includes this field to determine whether a new version of the configuration utility 34 is available. If the revision number in the delivery site file is higher than the version number for the configuration utility, configuration is not allowed. Instead, the user would be prompted to acquire a newer version of the configuration utility 34. File revision verification as described herein ensures that the most up-to-date delivery site selection algorithms are applied to the test data generated by the configuration utility 34.

2. A list of available Smart Mirror delivery sites. For each available delivery site, the following information is provided:

a. Host name. In the known Internet format of "www.server.com."

b. IP Address. A numerical Internet address in the known format. The address is presently a 32-bit number of the form w.x.y.z., where w, x, y, and z are each in the range of 0 to 255."

In regard to Claim 1, as amended, while Kenner at al. describe that "because the configuration utility of the invention is performing various network tests and providing the test results to the service provider, valuable data on system and network performance is available", as seen at least in Col. 6, lines 10-12, and delivery site files, including a list of available Smart Mirror delivery sites, as seen at least in Col. 8, line 48 to Col. 9, line 2, Applicant submits that, even in

combination, Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

"storing the determined localization information";

"receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In addition, in regard to Claim 17, as amended, while Kenner at al. describe that "because the configuration utility of the invention is performing various network tests and providing the test results to the service provider, valuable data on system and network performance is available", as seen at least in Col. 6, lines 10-12, and delivery site files, including a list of available Smart Mirror delivery sites, as seen at least in Col. 8, line 48 to Col. 9, line 2, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the

client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect";

"storing the determined localization information";

"receiving a request at the web server from the client terminal, the request comprising a link to the content store";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

Furthermore, in regard to Claim 31, as amended, while Kenner at al. describe that "because the configuration utility of the invention is performing various network tests and providing the test results to the service provider, valuable data on system and network performance is available", as seen at least in Col. 6, lines 10-12, and delivery site files, including a list of available Smart Mirror delivery sites, as seen at least in Col. 8, line 48 to Col. 9, line 2, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. fail to disclose or suggest "a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a

user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal."

Applicant therefore submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. fail to meet Claims 1, 17, and 31, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. be modified to meet Claims 1, 17, and 31, as amended. Furthermore, it would take significant modification and undue experimentation for Farber et al., Guyton et al., and/or Bohannon et al. to meet Claims 1, 17, and 31, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., and/or Bohannon et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the

references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, 17, and 31, as amended, overcome a rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al.

As Claims 7 and 9 depend from amended independent Claim 1, as Claims 23 and 25 depend from amended independent Claim 17, and as Claims 37, 39, and 40 depend from amended independent Claim 31, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

Furthermore, Applicant has also amended dependent Claim 40 to claim the system of Claim 31, wherein the localization information comprises a map of all IP address space within a global routing table. Support is seen in the Application as filed, at least on page 11, lines 12-17. Applicant has amended Claim 40, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendment herein was not made for any reason related to patentability.

45-51. The Office Action states that "Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claim 31, further in view of Guyton et al. ("Locating Nearby Copies of Replicated Internet Servers" (1995)) above, and further in view of Kenner et al. (US 6,003,030) filed on 10/18/96 and patented on 12/14/99."

In regard to Claim 41, the Office Action concedes that "Farber et al. do not disclose, wherein the localization information comprises triangulation tests and performance tests of the networks."

The Office Action also conceded that "Guyton et al. do not teach wherein the localization information comprises performance tests of the networks."

As discussed above, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. fail to meet Claim 31, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al. be modified to meet Claim 31, as amended. Furthermore, it would take significant modification and undue experimentation for Farber et al., Guyton et al., and/or Bohannon et al. to meet Claims 31, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., and/or Bohannon et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 31, as amended, overcomes a rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al., Guyton et al., Bohannon et al., and/or Kenner et al.

As Claim 41 depends from amended independent Claim 31, and inherently contains all the limitations of the Claim 31, Claim 41 is seen to be patentable as well.

52-55. The Office Action states that "Claims 13, 29, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claims 1, 17, and 31 above, and further in view of Turnbull (US Pub 2002/0133626) filed on 3/17/2001 and published on 9/19/2002.

In regards to Claims 13, 29, and 43, the Office Action concedes that "Farber et al. do not disclose, wherein the localized link is included in a web page, and wherein the webpage is transmitted to the user.

However, the Office Action also stated that "In the same field of endeavor Turnbull. teach whereas the requested link is included on a webpage and transmitted to the user (abstract).

Applicant disagrees that Claims 13, 29, and 43 are unpatentable over Farber et al. (US 6,185,598) in view of Turnbull.

Hilton Davis / Festo Statement

Applicant has amended Claims 1, 17, and 31, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Turnbull describes a web content format for mobile devices, as seen at least in the abstract, wherein:

> "A mobile device downloads a desired World Wide Web page from a Web server. The Web server sends a Web page that includes a WML

formatted hyper-link to access reduced format WML format Web pages that fit on the mobile device's display. The user of the mobile device selects the mobile device access mode hyper-link that instructs the Web server to continue sending only the WML format Web pages."

In regard to Claim 1, as amended, while Turnbull describes that a "Web server sends a Web page that includes a WML formatted hyper-link to access reduced format WML format Web pages that fit on the mobile device's display", as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Turnbull fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

"storing the determined localization information";

"receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In addition, in regard to Claim 17, as amended, while Turnbull describes that a "Web server sends a Web page that includes a WML formatted hyper-link to access reduced format WML format Web pages that fit on the mobile device's display", as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Turnbull fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each network server from which users connect";

"storing the determined localization information";

"receiving a request at the web server from the client terminal, the request comprising a link to the content store";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

Furthermore, in regard to Claim 31, as amended, while Turnbull describes that a "Web server sends a Web page that includes a WML formatted hyper-link to access reduced format WML format Web pages that fit on the mobile device's display", as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Turnbull fail to disclose or suggest "a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user

terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal."

Applicant therefore submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Turnbull fail to meet Claims 1, 17, and 31, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., Bohannon et al., and/or Turnbull be modified to meet Claims 1, 17, and 31, as amended. Furthermore, it would take significant modification and undue experimentation for any of Farber et al., Guyton et al., and/or Bohannon et al. and/or Turnbull to meet Claims 1, 17, and 31, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., Bohannon et al., and/or Turnbull fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the

claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, 17, and 31, as amended, overcome a rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al., Guyton et al., Bohannon et al., and/or Turnbull.

As Claim 13 depends from amended independent Claim 1, as Claim 29 depends from amended independent Claim 17, and as Claim 43 depends from amended independent Claim 31, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

56-62. The Office Action states that "Claims 14, 15, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 6,185,598) filed on 2/10/98 and patented on 2/6/01 as applied to claims 1 and 17, above, and further in view of Goldszmidt et al. ("Load Distribution for Scalable Web Servers: Summer Olympics 1996 – A Case Study")."

In regard to Claims 14, 15, and 30, the Office Action concedes that "Farber et al. do not disclose, wherein the preferred mirror is determined from the request IP address or IP network of the user." In regard to Claim 35, the Office Action concedes that "Farber et al. do not disclose wherein the unique address comprises a terminal IP address."

However, the Office Action also states that "In the same field of endeavor Goldszmidt et al. teach whereas the preferred mirror is determined from the request IP address or IP network of the user (Sec. 2 2nd Paragraph)." The Office Action also states that "In the same field of endeavor Goldszmidt et al. teach the unique address being the terminal IP address (Sec. 2 2nd Paragraph)."

Goldszmidt describe the sharing of load of HTTP requests in a system having scalable web servers, as seen eat least in the Abstract.

Goldszmidt describe the routing of incoming HTTP requests, as seen at least in Section 2, Paragraph 2, wherein:

> "Incoming HTTP requests from the Internet were forwarded via IP filtering routers to a WOMsprayer (Section 4) which then routed them to one of the servers. DNS requests were forwarded to a modified name server, WOM-DNS, (Section 3). The filtering IP routers, WOMsprayer and WOM-DNS were attached to an "external" 16Mb/s Token Ring."

While Goldszmidt describes that "HTTP requests from the Internet were forwarded via IP filtering routers" in a load distribution system, Applicant submits that there is no disclosure or suggestion, of a process or system, as cited in Claims 1, 17, and/or 31, as amended, wherein the preferred mirror is further determined based on any of the request IP address and the request IP network of the user.

In regard to Claim 1, as amended, while Goldszmidt describes that "HTTP requests from the Internet were forwarded via IP filtering routers" in a load distribution system, as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal, wherein the server application and the client application are

integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to each of the network servers;

"storing the determined localization information";

"receiving a request at the web server from a user at the client terminal, the request comprising a link to mirrored content";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

In addition, in regard to Claim 17, as amended, while Goldszmidt describes that "HTTP requests from the Internet were forwarded via IP filtering routers" in a load distribution system, as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt fail to disclose or suggest a process which, *inter alia*, comprises the steps of:

"providing a server application at a web server and a client application at a client terminal having a unique address, wherein the server application and the client application are integrated to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application";

"determining localization information for each mirrored instance of the content store to each network server from which users connect, wherein the localization information comprises the number of hops and latency from each

mirrored instance of the content store to each network server from which users connect";

"storing the determined localization information";

"receiving a request at the web server from the client terminal, the request comprising a link to the content store";

"querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror instances and the unique address";

"dynamically generating a localized link to the determined preferred mirror instance through the server application at the web server"; and

"transmitting the localized link to the client terminal".

Furthermore, in regard to Claim 31, as amended, while Goldszmidt describes that "HTTP requests from the Internet were forwarded via IP filtering routers" in a load distribution system, as seen at least in the Abstract, Applicant submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt fail to disclose or suggest "a proximity resource allocation system for providing a link from any network server within a plurality of network servers from which a user terminal having a unique address connects to a preferred mirror within a plurality of mirrors comprising a content store, comprising:

a server application at a web server that is integrated with a client application at the user terminal to provide localization decisions invisibly to a user, and to provide links to localized content from the server application to the client application; and

a localization database comprising storage of localization information for each mirror of the content store to each of the network servers, wherein the localization information comprises the number of hops and latency from each of the plurality mirrors to each of the network servers;

the server application for receiving a request at the web server from the user terminal, the request comprising a link to the content store, for querying the localization database and applying a set of rules to the stored localization information through the server application at the web server to determine a

preferred mirror for the user terminal, wherein the determination is invisible to the user, the rules comprising a function of the stored hop information and the stored latency information between each of the mirrors and the unique address, for dynamically generating a localized link to the determined preferred mirror through the server application at the web server, and for transmitting the localized link to the user terminal."

Applicant therefore submits that, even in combination, Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt et al. fail to meet Claims 1, 17, and 31, as amended. As well, there is no suggestion, express or implied, that Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt et al. be modified to meet Claims 1, 17, and 31, as amended. Furthermore, it would take significant modification and undue experimentation for any of Farber et al., Guyton et al., and/or Bohannon et al. and/or Goldszmidt et al. to meet Claims 1, 17, and 31, as amended.

Therefore, the *prima facie* obviousness case is incomplete because Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, 17, and 31, as amended, overcome a rejection under 35 U.S.C. §103(a) as being unpatentable over Farber et al., Guyton et al., Bohannon et al., and/or Goldszmidt et al.

As Claim 14 and 15 depend from amended independent Claim 1, as Claim 30 depends from amended independent Claim 17, and as Claim 35 depends from amended independent Claim 31, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

Other Amendments.

Applicant has also amended dependent Claims 2, 5-9, 13-15, 18, 21-25, 30, 36-39, and 41, to provide proper antecedent terminology. Applicant has also amended the Specification to correct minor grammatical errors. Applicant submits that the amendments do not introduce new matter into the Application.

CONCLUSION

For the foregoing reasons, the claims in the present application are directed to statutory subject matter and are patentably distinguished over the cited references. Applicant also submits that the amendments do not introduce new matter into the Application. Based on the foregoing, Applicant considers the invention to be in condition for allowance. Applicant earnestly solicits the Examiner's withdrawal of the rejections set forth in the prior Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States Patent.

Respectfully Submitted,

Michael A. Glenn
Reg. No. 30,176

Customer No. 22862

Amendments to the Drawings

In Figure 1, please replace the reference character "30a" associated with the element entitled "User Terminal" in the lower region of Figure 1 with reference character "30b", as seen in the formal replacement sheet.